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December 23, 2016

Yu-Ting Guilaran.
Director
Pesticide Re-Evaluation Division
Office of Pesticide Programs
c/o OPP Docket
Environmental Protection Agency
Docket Center (EPA/DC)
(2822IT)
1200 Pennsylvania Avenue, NW
Washington, DC 20460-001

Re: Chlormequat Chloride Preliminary Work Plan EPA-HQ-OPP-2015-0816

Dear Mr. Guilaran:

These comments are submitted by Taminco US LLC in response to the November 3, 2016 Federal Register notice announcing the opening of the docket pertaining to the registration review of Chlormequat Chloride (Case no. 7069). Taminco appreciates the opportunity to provide initial comments on the information the U.S. Environmental Protection Agency (EPA or Agency) has placed in the docket, in particular, the Preliminary Work Plan (PWP). Based on review of the PWP, Taminco notes the following regarding some of the proposed data requirements for Chlormequat Chloride.

The Registration Review document entitled "Registration Review: Preliminary Problem Formulation for Environmental Fate, Ecological Risk, Endangered Species, and Human Health Drinking Water Exposure Assessments for Chlormequat Chloride" clearly states that the environmental fate database is incomplete. As a results, additional data requirements included in the PWP include aerobic soil metabolism (835.4100, one U.S. soil), aerobic aquatic metabolism (835.4300, one sediment/water system) and anaerobic aquatic metabolism (835.4400, two sediment/water systems) studies with more exhaustive extraction to allow definitive identification of any major degradates. The conduct of these studies will have significant impact on ecological effects risk assessments as well as the determination of whether additional ecological effects studies are warranted and should be considered before requiring specific biological testing

Specific requirements are discussed below.

850.1500 Freshwater fish full life cycle test

A full life cycle test on freshwater species is required if the end-use product is intended to be applied directly to water, or is expected to be transported to water from the intended use site, and when any of the following conditions apply:



- i. If the estimated environmental concentration (EEC) is  $\geq$ 0.1 of the no-observed-effect level in the fish early-life stage or invertebrate life cycle test;
- ii. If studies of other organisms indicate that the reproductive physiology of fish may be affected.

The uses of chlormequat chloride do not include direct application to water nor is significant transport from the intended use site to water expected. In the absence of either of these criteria, the additional conditions are not applicable. It should be noted that based on previous risk assessments, the maximum EEC for chlormequat chloride was 153 ppb based on an application rate of 33.3 lbs ai/acre. Although there is no freshwater fish early life stage study for EEC comparison, a supplemental 21-day chronic study in the rainbow trout has been reported with a NOAEC of 1400 ppm (1400000 ppb). The EEC is 0.0001 of this NOAEC. Further, the NOAEC in a daphnid life cycle study was 5 ppm (5000 ppb). The EEC is 0.03 of this NOAEC. A freshwater fish early life stage study is more appropriate for chlormequat chloride.

## 850.1730 Fish bioconcentration

Aqueous metabolism shows that chlormequat chloride is not persistent with reported half lives of 4.9 and 8.7 days in an aerobic aquatic metabolism study. The Agency is requiring additional testing in both aerobic and anaerobic aquatic systems to further evaluate potential chlormequat chloride persistence in water/sediment. In addition, the reported Kow is 2.51. On this basis, the fish bioconcentration study should not be required for chlormequat chloride.

850.4550 Cyanobacteria (Anabaena flos-aquae) toxicity

Based on references in the EFED document, this requirement was fulfilled by MRID 46715223, Hertl, J. (2000) Toxicity of CCC Techn. to Anabaena flos-aquae in an Algal Growth Inhibition Test: (Final Report). Project Number: 9481210, 2000/7001326, 2001/1021848. Unpublished study prepared by Institut fuer Biologische Analytik und Consulting IBACON. 44 p.

Sincerely yours,

Jessica McLaughlin

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**Crop Protection** 

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